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Nov 11 2004

SPL Meeting: DAQ Status

1) Migration to new web server

Completed. The online web pages are being served from b0web00, servlets are directed to b0web01.

Using updated OS so one can make use of newer versions of root in your servlets and stay more compatible with the online/offline software.

2) Reconfigure dap32 to Use RAID and Expand Disk Capacity

While dap32 is being reconfigured with hardware RAID controllers we moved the main code area to a temporary node.

Plan to move back to dap32 on Nov 11.

Main code areas will be RAIDed

```
35 GB  -> ~100 GB /cdf/code-Linux
           70 GB /cdf/cdf-cf-data1
           35 GB /cdf/svx/data1
           70 GB /cdf/code-level3
         ~100 GB /cdf/scratch
```

Expanded user scratch area

Want to serve L3 executables from dap32 and use dap34 as a build and development node for L3 and consumers.
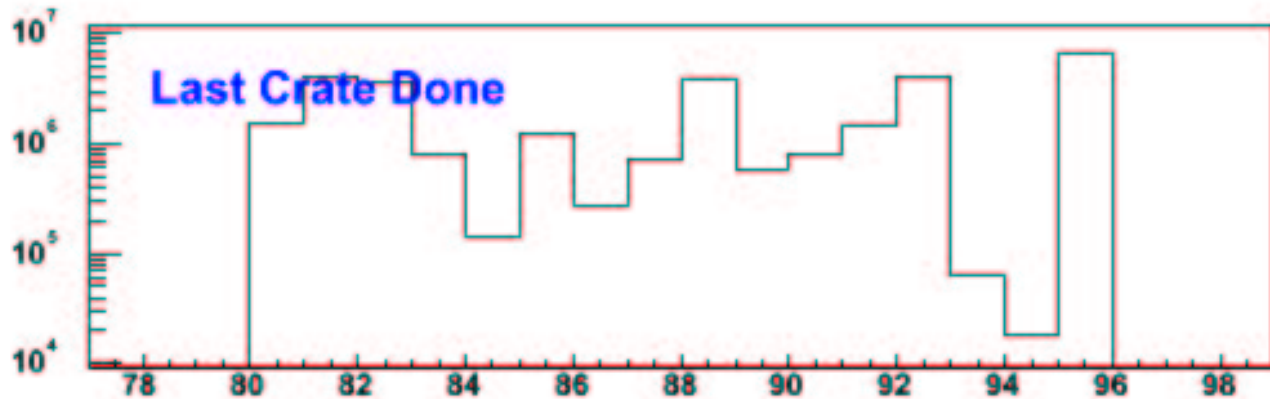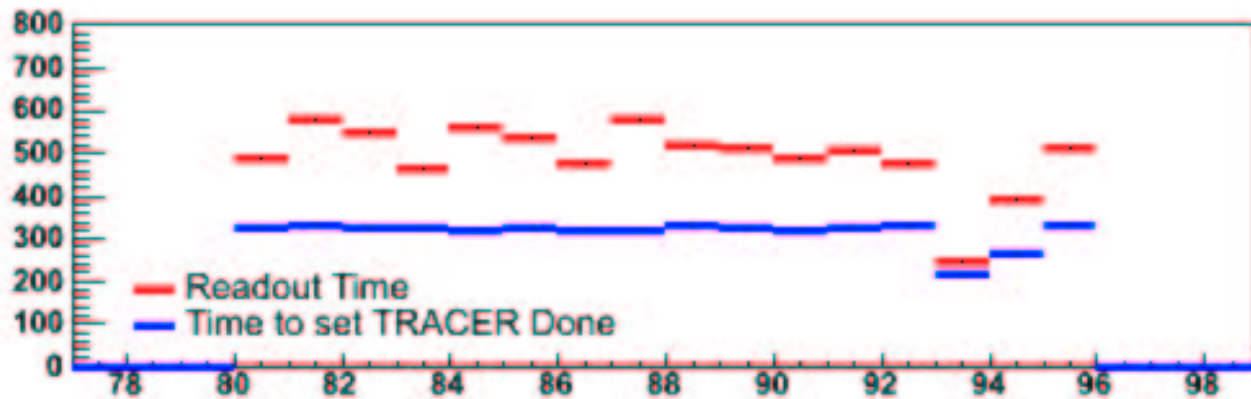
3) Ordered Faster Front End Processors

The remaining issues with the MVME5500 have been sorted out.

Currently running with the MVME5500 in a CCAL and COT crate

25 additional boards have been ordered - will install once they arrive.

We see the expected speedup in the readout rates and we still need to determine the best place to use the faster processors.

4) Move to New VxWorks Boot Node

Want to move off of the old desktop and setup two of the rack mount PCs for booting → plan is to boot half of the VxWorks nodes from one and the other half from a second.

Still working on this...

5) Database Upgrade

Purchased new hardware to replace the existing sun production database.

Ordered new disk arrays

The choice of the upgraded hardware was made after consultation with CD - will need their direct involvement in setting up the new hardware.

→ Ready for the 2005 shutdown

6) DSP V66

DSPV66 is ready. Newer version allows the use of a larger buffer to hold the header. Can set the TRACER done before reading out the header (additional 20 - 30 Hz).

FrontEnd readout code is ready and tested.

L3 unpacking code is ready - needs testing...

Need to update some offsets used in TDCTest and online calibrations.

7) Ordered and installed new PCs for the Trigger room

Replaced old trigger room PCs PII 350 - PIII 700 MHz with PIV 3 GHz.

Fermi RedHat LTS installed and works with existing online software.

8) Using a new version of the trigger inhibit GUI

Donatella responsible for development and maintenance of the trigger inhibit GUI.

Bugs have been fixed and code has been packaged in cvs.

9) VRB Expansion

Will need to expand the number of VRB crates in order to reduce the bottle neck at the EVB.

Currently exploring our options:
1) use three additional DAQ VRB crates
2) use split backplanes ($10K per pair) also may need to split L00
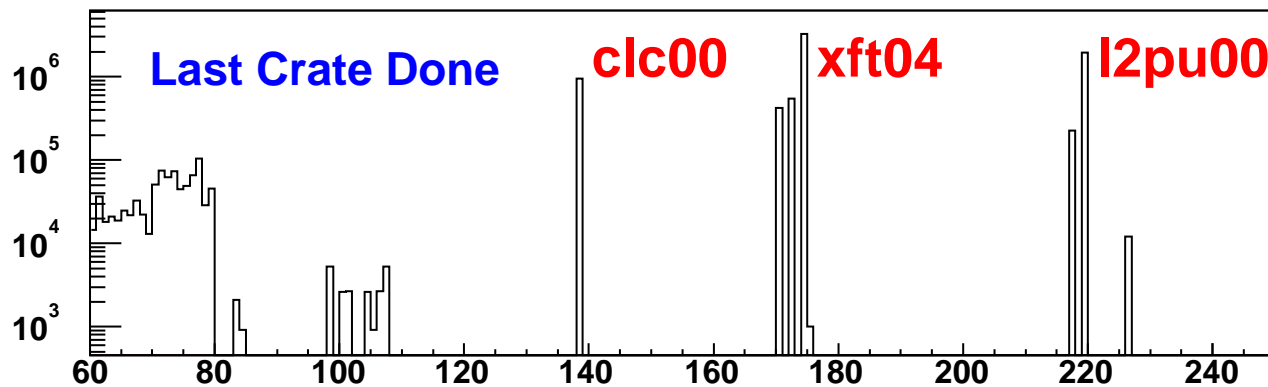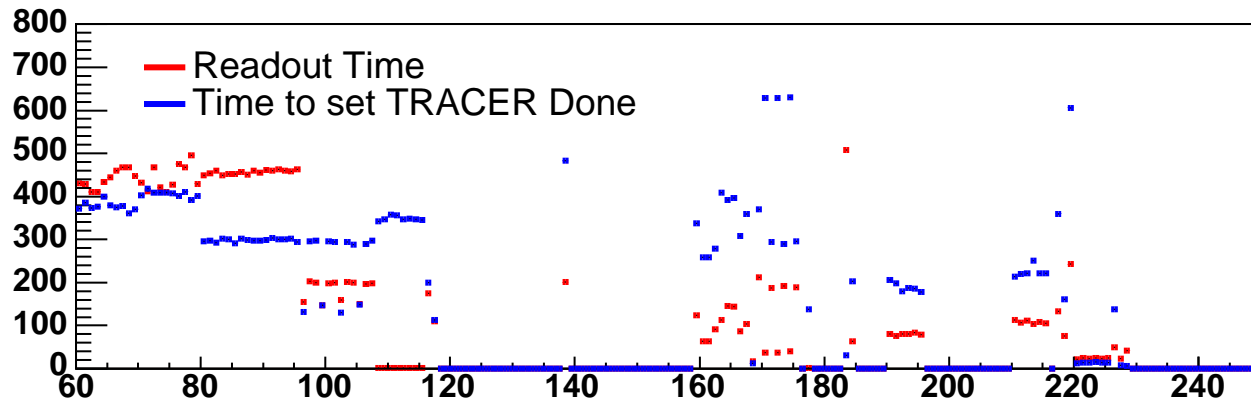
→ Ready for 2005 shutdown

10) Serial Line Expansion

Will need to increase the number of serial line ports when we increase the number of VRB crates

Want to replace existing terminal server (serial ports and custom configured PC) with dedicated terminal servers

Cyclades-TS3000 48 ports $4000 (need about 200 ports)

11) Readout Issues

xft, l2pu - use readout lists to suppress diagnostic information

clc - need to optimize DPM readout

wcal - was set in synchronous readout mode

ccal - use faster processors